

# COMMONWEALTH of VIRGINIA

# DEPARTMENT OF FORENSIC SCIENCE

CENTRAL LABORATORY
A Nationally Accredited Laboratory

700 NORTH 5TH STREET RICHMOND, VIRGINIA 23219 (804) 786-6971

# CERTIFICATE OF INSTRUMENT ACCURACY

**INSTRUMENT:** 

Intox EC/IR II

SERIAL NUMBER:

010487

**CERTIFICATION DATE:** 

February 11, 2014

DATE RECERTIFICATION DUE:

August 10, 2014

The above listed instrument was found to meet all requirements for accuracy and performance established by the Department of Forensic Science as required by §9.1-1101 (B)(3). Measurement traceability is established through the use of reference materials supplied by an ISO/IEC 17025:2005 accredited calibration laboratory.

Estimation of Uncertainty of Measurement:

 $0.020 \pm 0.004$  g/210 L

 $0.150 \pm 0.007$  g/210 L

 $0.080 \pm 0.004$  g/210 L

 $0.250 \pm 0.007$  g/210 L

The Uncertainty of Measurement is reported at the 99.73% level of confidence and a coverage factor of k=3. The estimation of the Uncertainty of Measurement is calculated for the Certification process only.

Michelle M. Billeter

Forensic Scientist

CITY OF RICHMOND

COMMONWEALTH OF VIRGINIA

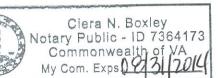
The foregoing was acknowledged before me this 0

by Michelle M. Billeter

Ciera N. Boxley, Notary Public

My commission expires: August 31, 2014

TLN



# Department of Forensic Science Breath Alcohol Section Instrument Maintenance History 1/1/1990 To 2/14/2014

| Instrument Serial Number: |               | 010487      | As of 14-Feb-14   |
|---------------------------|---------------|-------------|---|
| Maintenance               | Certification | Technician  |   |
| Date                      | Date          | Initials    | Remarks   |
| 11-Feb-14                 | 11-Feb-14     | MMB (26417) | CERTIFIED.  |
| 09-Jan-14                 | 30-Aug-13     | MMB (26417) | REPLACED DRY GAS STANDARD.  |
| 30-Aug-13                 | 30-Aug-13     | MMB (26417) | FIRMWARE/SOFTWARE UPGRADE. CALIBRATED AND CERTIFIED. REPLACED DRY GAS STANDARD. |
| 12-Mar-13                 | 12-Mar-13     | HMS (18910) | CERTIFIED   |
| 25-Oct-12                 | 25-Oct-12     | DBH (21250) | FIRMWARE/SOFTWARE UPGRADE, CALIBRATED AND CERTIFIED.                            |
| 29-Dec-11                 | 29-Dec-11     | HMS (18910) | CERTIFIED, REPLACED DRY GAS STANDARD.   |
| 24-Oct-11                 | 15-Jul-11     | HMS (18910) | REPLACED DRY GAS STANDARD.  |
| 22-Sep-11                 | 15-Jul-11     | HMS (18910) | REPLACED DRY GAS STANDARD.  |
| 15-Jul-11                 | 15-Jul-11     | DBH (21250) | CERTIFIED   |
| 11-Jul-11                 | 01-Apr-11     | HMS (18910) | SITE VISIT CONDUCTED.   |
| 20-Jun-11                 | 01-Apr-11     | HMS (18910) | REPLACED DRY GAS STANDARD.  |
| 01-Apr-11                 | 01-Apr-11     | HMS (18910) | CERTIFIED   |
| 06-Nov-09                 | 06-Nov-09     | SED (24178) | REPLACED TANK TOP LID, CERTIFIED.   |
| 03-Nov-09                 | 03-Nov-09     | MSK (21355) | REPLACED DIGITAL DISPLAY, CERTIFIED.  |
| 27-Apr-09                 | 27-Apr-09     | DBH (21250) | FIRMWARE/SOFTWARE UPGRADE, CERTIFIED.   |
| 23-Dec-08                 | 07-Nov-08     | DBH (21250) | REPLACED KEYBOARD. REPLACED PAPER OUT SWITCH IN PRINTER.                        |
| 07-Nov-08                 | 07-Nov-08     | HMS (18910) | CERTIFIED.  |
| 24-Oct-08                 | 24-Oct-08     | NMJ (22392) | CALIBRATED, CERTIFIED AND ACCEPTED.   |

## INTOX EC/IR II

**Quality Assurance Worksheet** 

Instrument Serial Number 010487 Worksheet Start Date 2/11/2014

Location Richmond 4th PD

Address 2219 Chamberlayne Ave Richmond VA 23222

DFS Technician Michelle Billeter License No. 26417

☐ Laboratory ☐ On-Site

Site Specification: No detrimental environmental conditions exist.

Instrument Barometer (mm HG) 769 Reference Barometer (mm HG) 768

Reference Barometer(RB)Serial # 009111 RB Calibration Due 5/23/2014

Measurement Assurance Check

Standard (sea level) **PA Target** minimum maximum Sample 1 0.308 0.300 0.304 0.294 0.313 Sample 2 0.308 Precision sample min sample max Sample 3 0.307 0.001 0.307 0.308

Standard (sea level) **PA Target** minimum maximum Sample 1 0.103 0.101 0.100 0.097 0.104 Sample 2 0.102 Precision sample min sample max Sample 3 0.103 0.001 0.102 0.103

Dry gas standard Lot No. (with tank no.) AG226201-18

Replaced dry gas standard (+O-ring)

Supplies

Mouthpieces

Installed at Location Certificates of Analysis
Operator Worksheet

Removed to DFS-Central Other:

Notes:

| Instrument Serial Number   | 010487                    |   | Certification Date                      | 2/11/2014                        |                         |
|--|---------------------------|---|---|----------------------------------|-------------------------|
| Calibrated   | ▼ Certified               |   | urement Assurance                       | e Check                          |                         |
| ✓ Instrument Test<br>(Successful completion denotes sa               | atisfactory condition     |   | eshooting/Maintenar                     | nce Worksheet Completed          |                         |
| Standard (sea level)<br>0.250<br>Precision<br>0                      | <b>PA Target</b> 0.253    | minimum<br>0.245<br>sample min<br>0.255 | maximum<br>0.260<br>sample max<br>0.255 | Sample 1<br>Sample 2<br>Sample 3 | 0.255<br>0.255<br>0.255 |
| Standard (sea level)<br>0.150<br>Precision<br>0                      | <b>PA Target</b> 0.152    | minimum<br>0.147<br>sample min<br>0.153 | maximum<br>0.156<br>sample max<br>0.153 | Sample 1<br>Sample 2<br>Sample 3 | 0.153<br>0.153<br>0.153 |
| Standard (sea level) 0.080 Precision 0.001                           | <b>PA Target</b> 0.081    | minimum<br>0.078<br>sample min<br>0.081 | maximum<br>0.084<br>sample max<br>0.082 | Sample 1<br>Sample 2<br>Sample 3 | 0.081<br>0.082<br>0.082 |
| Standard (sea level)<br>0.020<br>Precision<br>0.001                  | <b>PA Target</b><br>0.020 | minimum<br>0.017<br>sample min<br>0.019 | maximum<br>0.023<br>sample max<br>0.020 | Sample 1<br>Sample 2<br>Sample 3 | 0.019<br>0.020<br>0.020 |
| All measurements are in g/210L<br>Estimation of Uncertainty of Measu | rement and tracea         | ability records a                       | ire located within the                  | e Breath Alcohol Section         |                         |

Intox EC/IR II QA Worksheet
Issued by Calibration and Training Program Manager
Issue Date: 9-December-2013

**DFS** Technician

Issuing Analyst

Date

Department of Forensic Science
Serial Number: 010487 Test Number: 1767
Test Date: 02/11/2014 Test Time: 09:34 EST

Technician Initials: MMB Dry Gas Target: 0.253

Lot Number: 0651225015-02 Exp Date: 04/01/2014
Tank Pressure: 325 psi Barometric Pressure: 768 mmHg

System Check: Passed

| Test           | g/210L | Time  |
|----------------|--------|-------|
| DIAG           | Pass   | 09:34 |
| BLK            | 0.000  | 09:35 |
| CHK            | 0.255  | 09:36 |
| BLK            | 0.000  | 09:38 |
| CHK            | 0.255  | 09:38 |
| $\mathtt{BLK}$ | 0.000  | 09:40 |
| CHK            | 0.255  | 09:41 |
| BLK            | 0.000  | 09:43 |

#### Success

Standard Value (at sea level): 0.250 g/210L

Certification Status: Continued

Department of Forensic Science
Serial Number: 010487 Test Number: 1768
Test Date: 02/11/2014 Test Time: 09:44 EST

Technician Initials: MMB Dry Gas Target: 0.152

Lot Number: 0651215014-04 Exp Date: 04/01/2014
Tank Pressure: 737 psi Barometric Pressure: 769 mmHg

System Check: Passed

| Test | g/210L | Time  |
|------|--------|-------|
| DIAG | Pass   | 09:45 |
| BLK  | 0.000  | 09:46 |
| CHK  | 0.153  | 09:46 |
| BLK  | 0.000  | 09:48 |
| CHK  | 0.153  | 09:49 |
| BLK  | 0.000  | 09:50 |
| CHK  | 0.153  | 09:51 |
| BLK  | 0.000  | 09:53 |
|      |        |       |

#### Success

Standard Value (at sea level): 0.150 g/210L

Certification Status: Continued

Department of Forensic Science
Serial Number: 010487 Test Number: 1769
Test Date: 02/11/2014 Test Time: 09:54 EST

Technician Initials: MMB Dry Gas Target: 0.081

Lot Number: 0651208012-01 Exp Date: 04/01/2014
Tank Pressure: 889 psi Barometric Pressure: 769 mmHg

System Check: Passed

| Test | g/210L | Time  |
|------|--------|-------|
| DIAG | Pass   | 09:54 |
| BLK  | 0.000  | 09:55 |
| CHK  | 0.081  | 09:56 |
| BLK  | 0.000  | 09:57 |
| CHK  | 0.082  | 09:58 |
| BLK  | 0.000  | 09:59 |
| CHK  | 0.082  | 10:00 |
| BLK  | 0.000  | 10:02 |

#### Success

Standard Value (at sea level): 0.080 g/210L

Certification Status: Continued

Department of Forensic Science

Serial Number: 010487 Test Number: 1770 Test Date: 02/11/2014 Test Time: 10:03 EST

Technician Initials: MMB Dry Gas Target: 0.020

Lot Number: 0651202011-04 Exp Date: 04/01/2014
Tank Pressure: 1056 psi Barometric Pressure: 769 mmHg

System Check: Passed

| Test | g/210L | Time  |
|------|--------|-------|
| DIAG | Pass   | 10:03 |
| BLK  | 0.000  | 10:04 |
| CHK  | 0.019  | 10:05 |
| BLK  | 0.000  | 10:06 |
| CHK  | 0.020  | 10:07 |
| BLK  | 0.000  | 10:08 |
| CHK  | 0.020  | 10:09 |
| BLK  | 0.000  | 10:10 |

#### Success

Standard Value (at sea level): 0.020 g/210L

Certification Status: Success

## Intox EC/IR-II: Accuracy Check

Department of Forensic Science

Serial Number: 010487 Test Number: 1771 02/11/2014 Test Time: 10:13 EST Dry Gas Target: 0.304 Test Date: 02/11/2014

Lot Number: AG321804-04 Exp Date: 08/06/2015 Tank Pressure: 345 psi Barometric Pressure: 769 mmHg

System Check: Passed

| Test | g/210L | Time  |
|------|--------|-------|
| BLK  | 0.000  | 10:15 |
| CHK  | 0.308  | 10:15 |
| BLK  | 0.000  | 10:17 |
| CHK  | 0.308  | 10:18 |
| BLK  | 0.000  | 10:20 |
| CHK  | 0.307  | 10:21 |

Test Status: Success

Calibration CRC: AF74C041

## Intox EC/IR-II: Accuracy Check

Department of Forensic Science

Serial Number: 010487 Test Number: 1772
Test Date: 02/11/2014 Test Time: 10:25 EST

Dry Gas Target: 0.101

Lot Number: AG226201-18 Exp Date: 09/18/2014

Tank Pressure: 806 psi Barometric Pressure: 769 mmHg

System Check: Passed

| Test | g/210L | Time  |
|------|--------|-------|
| BLK  | 0.000  | 10:25 |
| CHK  | 0.103  | 10:26 |
| BLK  | 0.000  | 10:28 |
| CHK  | 0.102  | 10:29 |
| BLK  | 0.000  | 10:30 |
| CHK  | 0.103  | 10:31 |

Test Status: Success

Calibration CRC: AF74C041



# COMMONWEALTH OF VIRGINIA DEPARTMENT OF FORENSIC SCIENCE

# CERTIFICATE OF BLOOD ALCOHOL ANALYSIS AS DETERMINED BY A CHEMICAL TEST OF THE ACCUSED'S BREATH

| NAME OF ACCUSED   |  | NAME OF COURT   |  |
|---|--|---|--|
| NSTRUMENT, TEST,  |  | DFS   |  |
| BREATH ANALYSIS   |  |   |  |
| SAMPLE EXAMINED AND TEST CONDUCTED BY   |  | AGENCY  |  |
| BILLETER, MICHELLE, M   |  | DFS Central Lab   |  |
| DFS LICENSE NUMBER  | LICENSE EXPIRES  | DATE TEST CONDUCTED   |  |
| 26417   | 10/01/2014   | 02/11/2014  |  |
| TEST EQUIPMENT NUMBER   |  | 於在其中自然的政治的原则在的主义的   |  |
| 010487  |  | 學學學學學學學學學學學學學學學學學學學學學學學學學學學學學學學學學學學學學學學   |  |
|   |  |   |  |
| RESULTS: TIME SAMPLE TAKEN $\frac{1.0}{1.0}$  | ):39 EST   |   |  |
| Λ   | 0.0  |   |  |
| SAMPLE'S ALCOHOL CONTENT $\stackrel{\circ}{-}$  |  | GRAMS PER 210 LITERS OF BREATH  |  |
| EQUIPMENT AND IN ACCORDANCE WITH THE CONDUCTED IN ACCORDANCE WITH THE TEST THE ACCUSED WAS ADVISED OF HIS I | METHODS APPROVED THE DEPARTMENT'S RIGHT TO OBSERVE T ND THAT I POSSESS A | CONDUCTED; THAT THE TEST WAS CONDUCTED WITH THE TYPE OD BY THE DEPARTMENT OF FORENSIC SCIENCE; THAT THE TEST WAS SPECIFICATIONS; THAT PRIOR TO ADMINISTRATION OF THE PROCESS AND SEE THE BLOOD ALCOHOL READING ON THE EQUIF A VALID LICENSE TO CONDUCT SUCH TEST, GIVEN UNDER MY HAND |  |
| ☐ I HAVE RECEIVED A COPY OF THIS  | CERTIFICATE OF   | ANALYSIS  |  |
| □ SUBJECT REFUSED TO SIGN FOR CO  |  | SUBJECT'S SIGNATURE   |  |



End-of-Blow Time 10:37

End-of-Blow Time 10:39



## IntoxNet MIS Report Report Generated 14 Feb 2014 at 13:50

Test Results

|                                  | Instrument Serial Number 010487    |                              |
|----------------------------------|------------------------------------|------------------------------|
| Test # 001773 Subject Test       |                                    | _                            |
| Test Location 1 Department of    | Test Location 2 Forensic Science   | Test Location 3              |
| Test Date 11 Feb 2014            | Test Time 10:33                    | System Check Passed          |
|                                  | Remote/Local Local                 | •                            |
| Operator's Last Name BILLETER    | Operator's First Name MICHELLE     | Operator's Middle Initial M  |
| Agency DFS Central Lab           | License Numb                       | per 26417                    |
| Card Serial Number 126417        | Effective Date 10/01/2012          | Expiration Date 10/01/2014   |
| Subject's Last Name INSTRUMENT   | Subject's First N                  | lame TEST                    |
| Subject's Middle Initial         | Subject's Date of Birth 00/00/0000 | Subject's Sex Male           |
| Driver's License Number          | Driver's L                         | icense Expiration 00/00/0000 |
| Driver's License State           | Court Name Di                      | FS                           |
| End Date 11 Feb 2014 End Time 10 | :41 Result Time 10:39 Result D     | ate 11 Feb 2014 Result 0.00  |
| Data Type DIAG                   | Sample Value Pass                  | Sample Time 10:33            |
| Data Type BLK                    | Sample Value 0.000                 | Sample Time 10:34            |
| Data Type CHK                    | Sample Value 0.103                 | Sample Time 10:35            |
| Data Type BLK                    | Sample Value 0.000                 | Sample Time 10:36            |
| Data Type SUBJ                   | Sample Value 0.000                 | Sample Time 10:37            |
| Data Type BLK                    | Sample Value 0.000                 | Sample Time 10:38            |
| Data Type SUBJ                   | Sample Value 0.000                 | Sample Time 10:39            |
| Data Type BLK                    | Sample Value 0.000                 | Sample Time 10:40            |
| Standard Type Dry Gas Std        |                                    | Standard Value 0.101         |
| Standard Lot Number AG226201-18  | Standard                           | Expiration Date 09/18/2014   |
| Tank Pressure 801                | Barometric P                       | ressure 768 mmHg             |

Blow Volume 1738 cc

Blow Volume 1832 cc

Test Status Code 0

Blow Sample Number 2 Blow Duration 3.52 sec Tamper Evident Stamp 998dc2cc

Blow Sample Number 1

T 12:

Blow Duration 3.00 sec

Test Status Success